

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/799,768	03/15/2004	Hitoshi Inoue	Q80062	8635
23373	7590 01/25/2005		EXAM	INER
. SUGHRUE MION, PLLC			EVANISKO, LESLIE J	
2100 PENNSYLVANIA AVENUE, N.W. SUITE 800			ART UNIT	PAPER NUMBER
	ON, DC 20037		2854	

DATE MAILED: 01/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
	10/799,768	INOUE ET AL.
Office Action Summary	Examiner	Art Unit
	Leslie J. Evanisko	2854
The MAILING DATE of this communication Period for Reply	appears on the cover sheet wit	h the correspondence address
A SHORTENED STATUTORY PERIOD FOR RETHE MAILING DATE OF THIS COMMUNICATION - Extensions of time may be available under the provisions of 37 CF after SIX (6) MONTHS from the mailing date of this communication. If the period for reply specified above is less than thirty (30) days, and If NO period for reply is specified above, the maximum statutory period for reply within the set or extended period for reply will, by some any reply received by the Office later than three months after the nearned patent term adjustment. See 37 CFR 1.704(b).	ON. R 1.136(a). In no event, however, may a rent. a reply within the statutory minimum of thirty eriod will apply and will expire SIX (6) MONT tatute, cause the application to become ABA	oly be timely filed (30) days will be considered timely. HS from the mailing date of this communication. NDONED (35 U.S.C. § 133).
Status		
 1) Responsive to communication(s) filed on 2 2a) This action is FINAL. 2b) Since this application is in condition for allocation accordance with the practice und 	This action is non-final. owance except for formal matte	•
Disposition of Claims		
4) ☐ Claim(s) 8-14 is/are pending in the applica 4a) Of the above claim(s) is/are with 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 8-14 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and	ndrawn from consideration.	
Application Papers		
9)☐ The specification is objected to by the Exar 10)☐ The drawing(s) filed on 15 March 2004 is/a Applicant may not request that any objection to Replacement drawing sheet(s) including the co 11)☐ The oath or declaration is objected to by the	re: a) accepted or b) objective drawing(s) be held in abeyand rrection is required if the drawing(s)	ee. See 37 CFR 1.85(a). s) is objected to. See 37 CFR 1.121(d).
Priority under 35 U.S.C. § 119		
12) Acknowledgment is made of a claim for form a) All b) Some * c) None of: . 1. Certified copies of the priority docum 2. Certified copies of the priority docum 3. Copies of the certified copies of the application from the International Bu * See the attached detailed Office action for a	nents have been received. nents have been received in Ap priority documents have been i ireau (PCT Rule 17.2(a)).	oplication No received in this National Stage
Attachment(s)	-	
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SE	3/08) 5) Notice of Int	ımmary (PTO-413) /Mail Date. <u>20050119</u> ormal Patent Application (PTO-152) NBh +(On8lo+ton of がりの)/45957

Art Unit: 2854

SUPPLEMENTAL DETAILED ACTION

Upon further consideration by the Examiner, the previous Office Action dated January 11, 2005 has been <u>WITHDRAWN</u> and replaced with the following Office Action deemed to be more appropriate by the Examiner:

Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Application/Control Number: 10/799,768

Art Unit: 2854

3. Claims 8-10 rejected under 35 U.S.C. 103(a) as being unpatentable over Kasahara et al. (US 6,599,613) in view of Wedel et al. (US 6,573,877) and Ishikawa et al. (US 6,548,150). Kasahara et al. teach a method of manufacturing a display plate such as a watch or other measurement devices comprising the steps of providing a substrate, depositing an ink permeative layer being made of a "heat resistant" material containing at least one of polyester or polyurethane material so as to cover at least one of an obverse or reverse face of the substrate, providing digital print data according to the design of the instrument panel and jetting ink to the ink permeative layer in accordance with the digital print data. Particular attention is invited to column 9, lines 55-62 and column 10, line 64 through column 14, line 9. Note that Kasahara et al. teach that the display plate manufactured by this method could include watches, various other measurement apparatuses, electronic apparatuses, mechanical apparatuses and devices, etc. in column 14, lines 2-5. Although Kasahara et al. is silent with respect to whether the display plate could specifically include an instrument panel mounted on a vehicle, the manufacture of a vehicle instrument panel using digital printing technology is well known in the art, as exemplified by Wedel et al. in column 4, lines 60-62 in particular. Therefore, since digitally printing vehicle instrument panels is well known in the art (as shown by Wedel et al.) and additionally, an instrument panel can broadly be considered to be a measurement device, electronic or mechanical device as set forth by Kasahara, it would have been

Page 3

obvious to one of ordinary skill in the art to use the method of Kasahara et al.
to manufacture an instrument panel for a vehicle to provide rapid and costefficient personalized production of instrument panels for automobiles.

Page 4

Additionally, note that Kasahara et al. teach the ink permeative layer is made from a coating solution including a water-soluble polymer such as polyurethane or polyester in column 7, lines 23-38. Although Kasahara et al. does not specifically teach the ink permeative layer includes 20 to 80% of urethane or polyester resin, note the use of a ink permeative layer including 20 to 80 % of at least one of urethane resin or polyester resin is well known in the art, as exemplified by Ishikawa et al. in column 6, line 42 through column 7, line 4. Furthermore, note that any material can be considered to be "heatresistant" to some extent and therefore the materials of both Kasahara et al. or Ishikawa et al. meet this language. In view of this teaching, it would have been obvious to one of ordinary skill in the art to provide the ink permeative layer of Kasahara et al. to include 20 to 80% of urethane resin or polyester resin as taught by Ishikawa et al. to provide an ink permeative layer that provides superior recording properties, superior light resistance, and superior surface strength (i.e., peeling resistance) for inkjet recorded images.

With respect to claim 9, note Kasahara et al. teach that manufacturing of display plates using an ink jet printer to allow for printing a small quantity of products with an image pattern according to the desire of the customer is well

Art Unit: 2854

known in the art, as exemplified by Kasahara et al. in column 3, lines 61 through column 5, line 15.

With respect to claim 10, note Kasahara et al. teach an additional layer 16 may be provided between the substrate and ink receiving layer which at least partially functions to improve adhesion between the substrate 10 and the ink receiving layer 17 and can therefore be considered "an adhesive layer" as broadly recited. See, in particular, column 6, line 51 through column 7, line 50. Note that, for example, making the coating layer 16 porous through a surface treatment (as described in column 7, lines 39-50) would inherently increase the adhesive properties between the ink receiving layer and substrate.

4. Claims 11-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wedel et al. (US 6,573,877 B2) in view of Fukushima et al. (WO 01/45957). Wedel et al. teach a method of manufacturing an instrument panel mounted on a vehicle comprising all of the steps as recited including providing a substrate 7, providing print data according to a design of an instrument panel including at least a symbol (see Figure 1), and applying ink in the form a shape of the symbol on a first face of the substrate, and applying ink on a second face of the substrate to exclude an area corresponding to the shape of the symbol. The embodiment of Figure 2 and described in column 4, lines 1-12 in particular shows ink layers being applied to both faces of the substrate as recited. Additionally note that Wedel et al. teach the printing of the instrument

Art Unit: 2854

panel can be a <u>digital</u> printing process in column 4, lines 60-62. Ink jet printing is a well known and widely recognized type of digital printing. Furthermore, note Fukushima et al. teach using an inkjet printer to print patterns and symbols on a dial or measuring instrument is well known in the art in lines 10-13 of page 2 and lines 10-13 of page 33 of the English language translation attached to this Office Action. Therefore, it would have been obvious to one of ordinary skill in the art to provide steps of "jetting" the ink onto the various layers in the method for digitally printing the instrument panel as taught by Wedel et al. to provide the known advantages of digital printing, such as more rapid, clear, and accurate printing, even in multiple colors.

Furthermore, although Wedel et al. does not specifically teach the steps of providing a first and second ink permeative layer over the first and second faces of the substrate as recited, a method of manufacturing a display device by jetting ink on the use of providing an ink receptive layer on one or both sides of a base material is well known in the art as exemplified by Fukushima et al. (see page 12, lines 20-22 of the English language translation attached to this Office Action). In view of this teaching, it would have been obvious to one of ordinary skill in the art to provide ink permeative layers on both sides of a substrate as taught by Fukushima et al. in the printing method of Wedel et al. to provide better adhesion of the ink printed on the plastic substrate of Wedel et al.

Art Unit: 2854

With respect to claim 12, note Fukushima et al. teach the step of providing an "adhesive" layer (i.e., the "treated" undercolor coating 3 and clear coating 4) between the substrate 1 and one of the first and second ink permeative layers 2 in the paragraphs beginning on the bottom of page 19 through the middle of page 20 of the English language translation. See also Figures 3 and 10. Note Fukushima et al. teach the treatment of the layers provides improved adhesion strength and thereby the treated layers can be considered to be an "adhesive layer" as broadly recited. In view of this teaching, it would have been obvious to one of ordinary skill in the art to provide an adhesive layer between the substrate and ink permeative layer to provide better adhesion of the ink receptive layer to the surface of the substrate.

With respect to claim 13, note Wedel et al. teach the substrate 7 is transparent in column 3, lines 32-35.

With respect to claim 14, note Wedel et al. teach the printing is performed by a digital printing process in column 4, lines 60-62 and therefore would inherently include "digital print data" as recited.

Response to Arguments

5. Applicant's arguments with respect to claims 8-14 have been considered but are most in view of the new ground(s) of rejection.

Art Unit: 2854

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Leslie J. Evanisko** whose telephone number is **(571) 272-2161**. The examiner can normally be reached on M-Th 7:30 am-6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew H. Hirshfeld can be reached on (571) 272-2168.

Art Unit: 2854

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Crewie Evanisko Primary Examiner Art Unit 2854

lje January 19, 2005